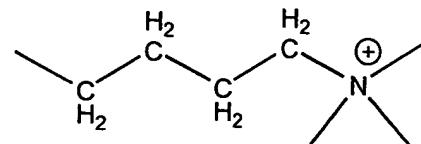


Adenosine Cyclic Ketal (ACK)

when $R_1 = R_2 =$



and R_3, R_4 and R_5 = hydrogen

and $R_6 =$

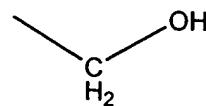


Figure 1A. Chemical structure of adenosine cyclic ketal (ACK) and the chemical formula of the compound nonamethonium adenosine cyclic ketal (nonamethonium ACK).

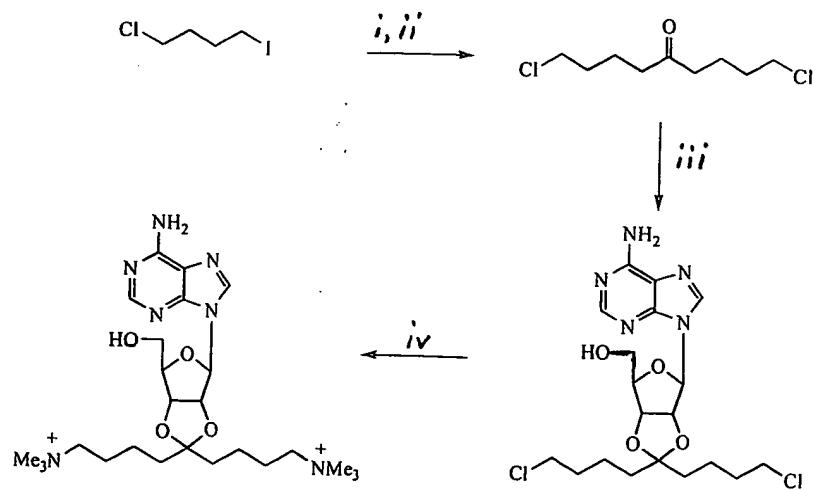


Figure 1B: The synthetic scheme for synthesizing nonamethonium adenosine cyclic ketal. The reagents and conditions are: i) zinc dust, tetrahydrofuran (THF); ii) N-methylpyrrolidine, CoBr_2 , carbon monoxide; iii) adenosine, $\text{HCl}/\text{dioxane}$, $(\text{EtO})_3\text{CH}$, DMF; iv) 40% Me_3N in H_2O .

Fig. 2A

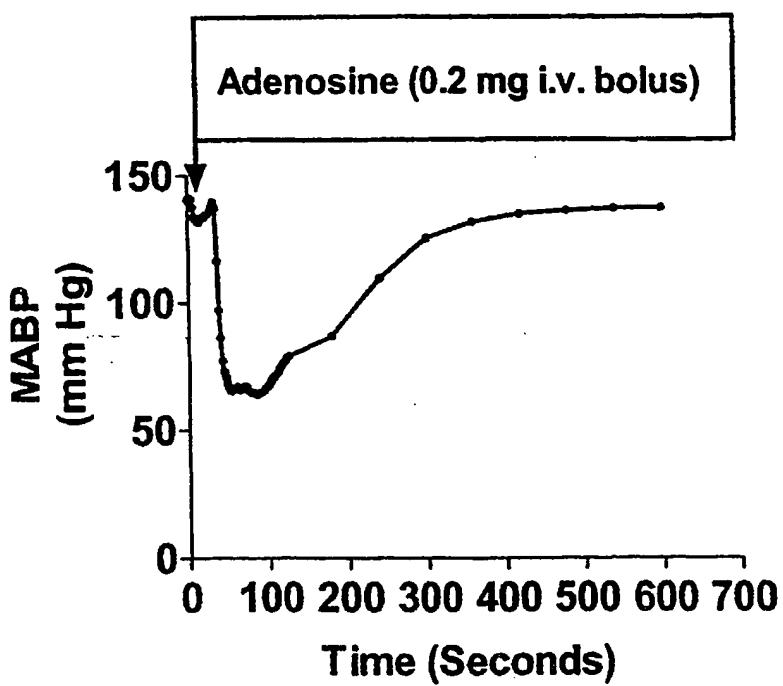


Fig. 2B

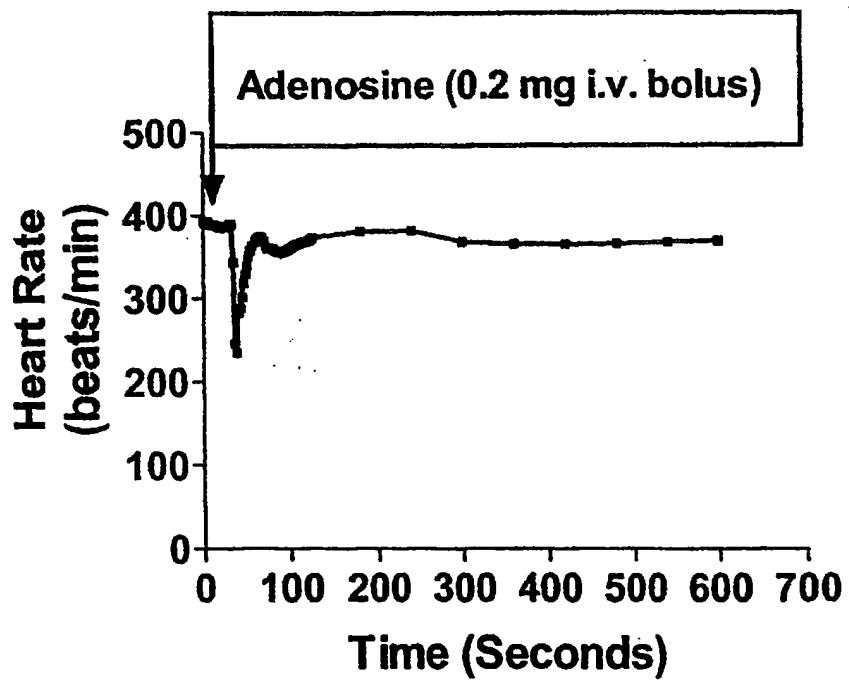


Fig. 3A

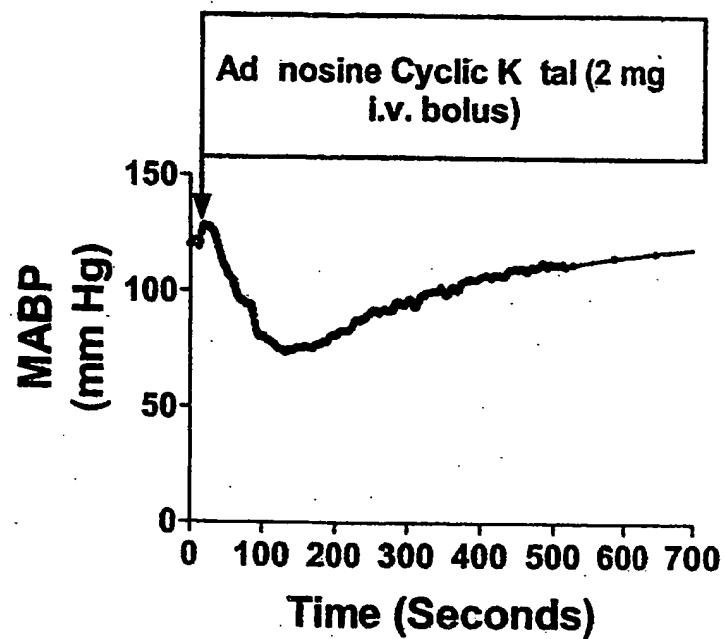


Fig. 3B

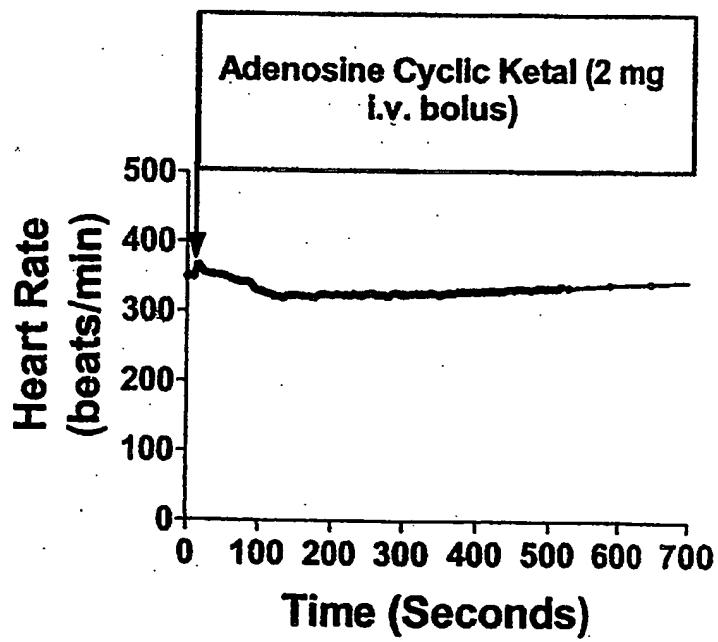


Fig. 4A

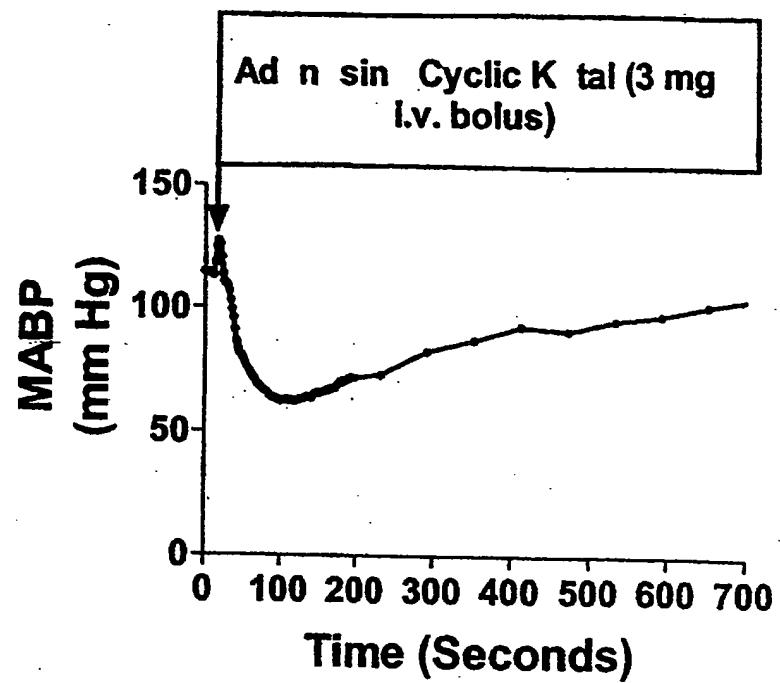


Fig. 4B

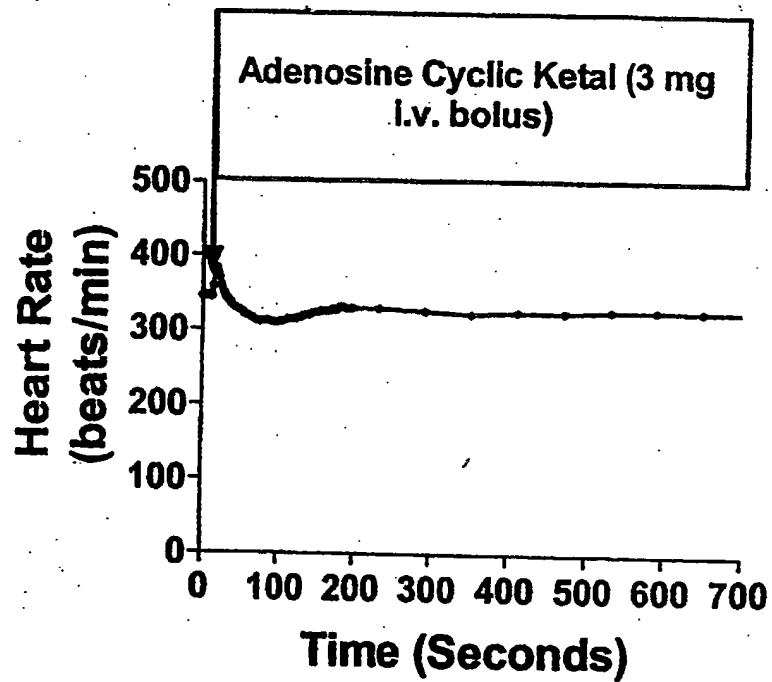


Fig. 5A

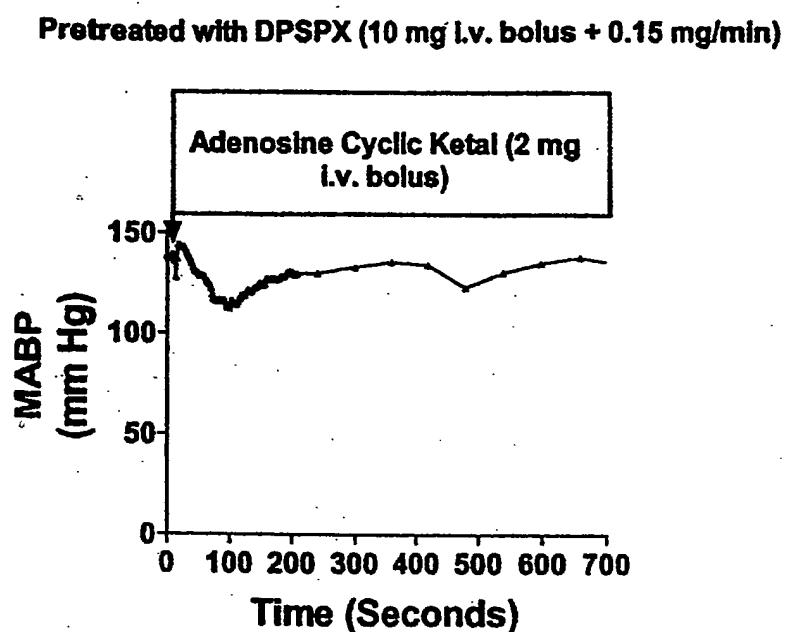


Fig. 5B

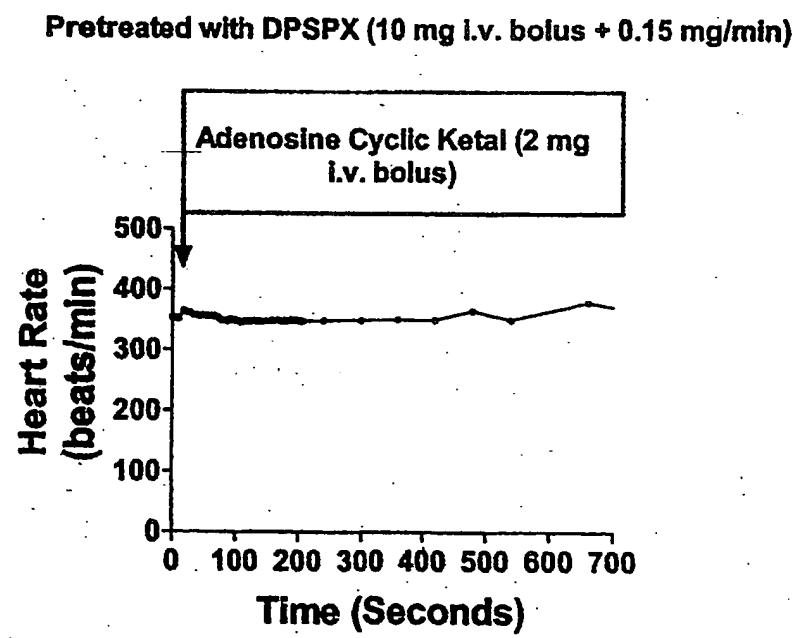


Fig. 6A

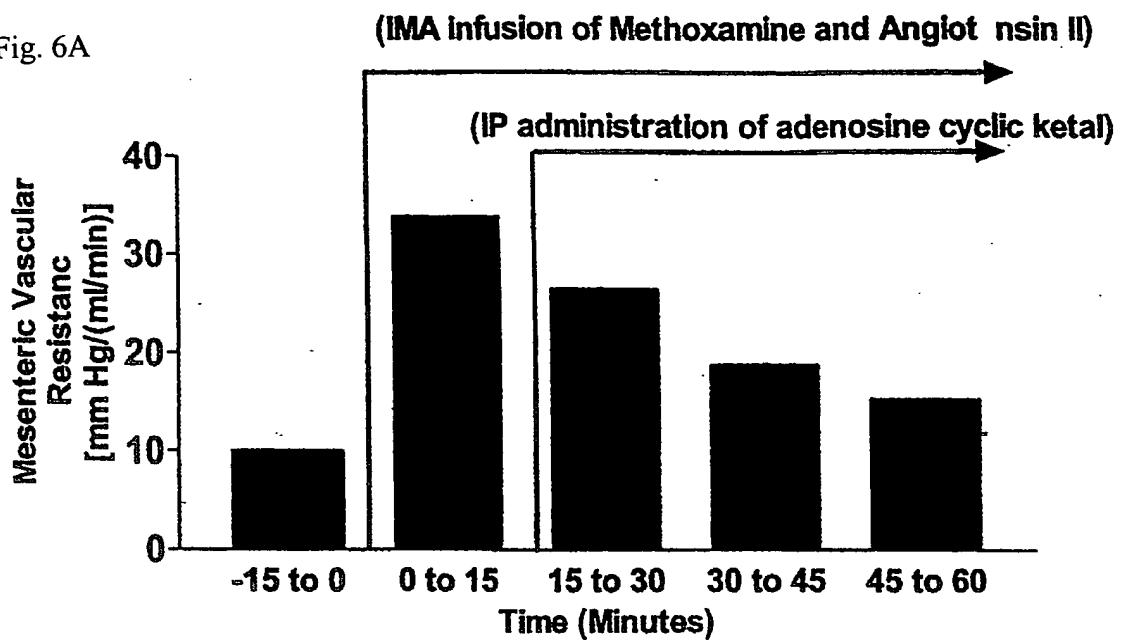


Fig. 6B

